

CLAIMS

1. A method for generating and delivering Web page content comprising media,
5 said method comprising:
parsing a URL containing proprietary tags to determine:
a content generation procedure to execute and corresponding input to said
procedure;
dynamic modifications to perform on said media;
10 user profile characteristics; and
proxy-cache control;
generating a unique final lookup key for said media;
checking a media cache, using said final lookup key;
if said media exists in said media cache, then
passing control to said proxy-cache control; and
delivering said media;
if said media does not exist in said media cache, then
separating dynamic media system tags from content generation control tags;
and
20 generating a unique intermediate image lookup key;
checking said media cache using said intermediate image lookup key;
if said intermediate media exists in said media cache, then
using said intermediate media for further processing;
if said intermediate media does not exist in said media cache, then
25 generating and caching said media, using said intermediate image lookup
key;
determining if dynamic processing is required and, if affirmative, then
operating upon said media by a dynamic content generator;
determining if content type is valid and, if negative, then
30 converting said media automatically to a valid type;
customizing said media for specified browser or client attributes using a user
profiling system;
attaching any specified cache-control directives to a response; and
delivering said media.

35 2. The method of Claim 1, wherein dynamic processing comprises directives for
zoom, pan, slice, and the like.

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3. A method for an end user to generate Web page content comprising media, said method comprising:

- adding original media to an image system;
- creating a content generation procedure containing instruction for processing said original media for said Web page content; and
- creating an HTML document referring to said processed media by using a URL pointing to said content generation procedure on said image system.

4. The method of Claim 3, further comprising:

10 providing an authoring subsystem, said subsystem assisting with choosing parameters and with designing said content generation procedure.

5. An apparatus for generating Web-safe media, using an HTML page having a URL, said URL having encoded proprietary tags, said apparatus comprising:

- a server for receiving media requests and delivering said Web-safe media;
- a media repository for storing original media;
- a content generation procedure containing instructions for transforming said original media into said Web-safe media;
- a URL tag parser for determining:
 - said content generation procedure to execute and any corresponding input parameters to be used by said procedure for generating a primary media to be cached;
 - dynamic content processing to be performed, if necessary by dynamic media procedures;
 - user profile information, if any to be used for modification of a resulting image;
- and
- cache control HTTP headers, if any to accompany said resulting image;
- a unique primary lookup key generated by said parser and associated with said primary cached media, wherein said primary cached media, if existing, is delivered as said Web-safe media through a media cache; and
- a unique secondary lookup key corresponding to intermediate media requiring said dynamic media processing by said dynamic media procedures, thereby generating corresponding derivative intermediate media, and said unique secondary lookup key corresponding to said derivative intermediate media stored in a secondary media cache.

6. The apparatus of Claim 5, wherein any of said original media, said content generation procedure, and said proprietary URL tags are modified, thereby rendering an automatically updated Web-safe media.

7. The apparatus of Claim 5, wherein said apparatus is configured in parallel to a Web server infrastructure, said existing Web server infrastructure providing said media requests.

5 8. The apparatus of Claim 7, wherein said apparatus is configurable to work either on-site or off-site to said Web server infrastructure.

9. The apparatus of Claim 5, wherein said primary cached media is composed of one or more original media images acquired from said media repository.

10 10. The apparatus of Claim 5, wherein said derivative intermediate media is suitably modified for the needs of zooming, panning, slicing, or the like.

11. An apparatus for delivering an HTML document and derivative Web-safe media, comprising:

15 means for placing within said HTML document universal resource locators, herein referred to as URLs, said URLs having proprietary tags, and said HTML document accessible to a Web server by a browser;

20 means for through a browser said URLs generating a request for media from an image system;

25 means for said image system:
processing said URLs by interpreting proprietary tags;
executing an image generation procedure on said media, said procedure indicated within said tags; and
returning derivative Web-safe media and said HTML document.

12. The apparatus of Claim 11, wherein said generated media is cached on said image system, and, whereby upon subsequent requests for said cached media, said image system retrieves and delivers said cached media.

30 13. The apparatus of Claim 11, wherein original media is stored in a media repository.